IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.

10/705,757

Confirmation No. : 4848

First Named

Eberhard WEIHE

Applicant

Filed

November 12, 2003

TC/A.U.

1743

Examiner

Unassigned

Docket No.

029310.52818US

Customer No.

23911

Title

Screening Method Using Pim1-Kinase or Pim3-Kinase

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R § § 1.97 AND 1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached Form PTO-1449 and/or listed herein and which the Examiner may deem relevant to patentability of the claims of the aboveidentified application.

STATEMENT OF RELEVANCE

The relevance of these references to the subject matter of the present invention is given in the specification of the present invention.

The present Information Disclosure Statement is being filed (1) no later than three months from the application's filing date or (2) before the mailing date of the first Office Action on the merits (whichever is later), and therefore no certification under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R.§ 1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Respectfully submitted,

J. D. Evans

Registration No. 26,269

Song Zhu, Ph.D.

Registration No. 44,420

November 2, 2004

CROWELL & MORING LLP Intellectual Property Group P.O. Box 14300 Washington, DC 20044-4300 Telephone No.: (202) 624-2500 Facsimile No.: (202) 628-8844

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute	e for form 1449A/PTO			C	complete if Known	
				Application Number	10/705,757	
	INFORMATION DISC	CLOS	SURE	Filing Date	November 12, 2003	
	STATEMENT BY AP	PLIC	CANT	First Named Inventor	Eberhard WEIHE	
				Art Unit	1743	
	(use as many sheets as n	ecessa	ry)	Examiner Name	Unassigned	
Sheet	1	of	4	Attorney Docket Number	029310.52818US	

	U.S. PATENT DOCUMENTS							
Examiner Initials'	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant			
		Number-Kind Code ² (if known)		<u> </u>	Figures Appear			
	AA	US- 5,262,311	11-16-1993	Arthur B. Pardee et al.				
		US-						

	_	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AB	ARMEN N. AKOPIAN ET AL., "A Tetrodotoxin-Resistant Voltage-Gated Sodium Channel Expressed by Sensory Neurons", Letters to Nature, January 18, 1996, pp. 257-262, Vol. 379	
	AC	JAMES A. BONINI ET AL., "Molecular Cloning and Tissue Expression of a Novel Orphan G Protein-Coupled Receptor from Rat Lung", Biochemical and Biophysical Research Communications, 1997, pp. 190-193, 234, Article no. RC976591, Academic Press	
	AD	ANTHONY DICKENSON ET AL., "Novel Pharmacological Targets in the Treatment of Pain", Pain Reviews, 1995, pp. 1-12, 2, Edward Arnold	
	AE	TATSUO FURUKAWA ET AL., "Identification of New Genes Expressed in a Human Erythroleukemia Cell Line", Blood Cells, Molecules and Diseases, 1996, pp. 11-22, 22, 2, The Blood Cells Foundation, LaJolla, California, USA	
	AF	M. HUBANK ET AL., "Identifying Differences in mRNA Expression by Representational Difference Analysis of cDNA", Nucleic Acids Research, 1994, pp. 5640-5648, Vol. 22, No. 25	
	AG	PENG LIANG ET AL., "Differential Display of Eukaryotic Messenger RNA by Means of the Polymerase Chain Reaction", Science, August 14, 1992, pp. 967-971, Vol. 257	

Examiner	Date
Signature	Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

				Complete if Known			
Substitute	Substitute for form 1449B/PTO		Application Number	10/705,757			
	INFORMATION DIS	CL OS	IRE	Filing Date	November 12, 2003		
	STATEMENT BY A			First Named Inventor	Eberhard WEIHE		
	STATEMENT BY A	ir Lio	7141	Art Unit	1743		
	(use as many sheets as	s necessa	rv)	Examiner Name	Unassigned		
Sheet	2	of	4	Attorney Docket Number	029310.52818US		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	AH	G.MC. POIRIER ET AL., "Screening Differentially Expressed cDNA Clones Obtained by Differential Display Using Amplified RNA", Nucleic Acids Research, 1997, pp. 913-914, Vol. 25, No. 4, Oxford University Press	
	Al	THOMAS R. TÖLLE, "Chronischer Schmerz", 1997	
	AJ	JACKSON S. WAN ET AL., "Cloning Differentially Expressed mRNAs", Nature Biotechnology, December 1996, pp. 1685-1691, Volume 14	
	AK	CLIFFORD J. WOOLF ET AL., "Peripheral Nerve Injury Triggers Central Sprouting of Myelinated Afferents", Letters to Nature, January 2, 1992, pp. 75-78, Vol. 355	
	AL	HIROSHI BABA ET AL., "Peripheral Inflammation Facilitates A β Fiber-Mediated Synaptic Input to the Substantia Gelatinosa of the Adult Rat Spinal Cord", The Journal of Neuroscience, January 15, 1999, pp. 859-867, 19, 2, Society for Neuroscience	
	АМ	CHIH-CHENG CHEN ET AL., "A P2X Purinoceptor Expressed by a Subset of Sensory Neurons", Letters to Nature, October 5, 1995, pp. 428-431, Vol. 377	
	AN	DAVID DUBUISSON ET AL., "The Formalin Test: A Quantitative Study of the Analgesic Effects of Morphine, Meperidine, and Brain Stem Stimulation in Rats and Cats", Pain, 1977, pp. 161-174, 4, Elsevier/North-Holland Biomedical Press	
	AO	P.G. GUNASEKAR ET AL., "NMDA Receptor Activation Produces Concurrent Generation of Nitric Oxide and Reactive Oxygen Species: Implication for Cell Death", Journal of Neurochemistry, 1995, p. 2016-2021, Vol. 65, No. 5, Lippincott-Raven Publishers, Philadelphia, USA	
	AP	SVEN KLUβMANN ET AL., "Mirror-Image RNA that Binds D-Adenosine", Nature Biotechnology, September 1996, pp. 1112-1115, Vol. 14	

Examiner	Date	
Signature	Cons	sidered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

				Complete if Known			
Substitute	for form 1449B/PTO			Application Number	10/705,757		
	INFORMATION DI	6CI OSI	IDE	Filing Date	November 12, 2003 Eberhard WEIHE		
	STATEMENT BY			First Named Inventor			
	SIAIEMENIDIA	4FFLIOA	VIV I	Art Unit	1743		
	(use as many sheets a	as necessar	v)	Examiner Name	Unassigned		
Sheet	3	of	4	Attorney Docket Number	029310.52818US		

		NON PATENT LITERATURE DOCUMENTS]
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AQ	AXEL METHNER ET AL., "A Novel G Protein-Coupled Receptor with Homology to Neuropeptide and Chemoattractant Receptors Expressed during Bone Development", 1997, pp. 336-342, 233, Article no. RC976455, Academic Press	:
	AR	LAUREN SOMPAYRAC ET AL., "Overcoming Limitations of the mRNA Differential Display Technique", Nucleic Acids Research, 1995, pp. 4738-4739, Vol. 23, No. 22, Oxford University Press	
	AS	JOSEPH B. WATSON ET AL., "Differential cDNA Screening Strategies to Identify Novel Stage-Specific Proteins in the Developing Mammalian Brain", Dev. Neurosci., 1993, pp. 77-86, 15	
	AT	M. ZIMMERMANN ET AL., "Plasticity of the Nervous System at the Systemic, Cellular and Molecular Levels: a Mechanism of Chronic Pain and Hyperalgesia", Progress in Brain Research, 1996, pp. 233-259, Vol. 110, Elsevier Science B.V.	
	AU	DAVID BAUER ET AL., "Identification of Differentially Expressed mRNA Species by an Improved Display Techniques (DDRT-PCR)", Nucleic Acids Research, 1993, pp. 4272-4280, Vol. 21, No. 18, Oxford University Press	
	AV	TERENCE J. CODERRE ET AL., "Contribution of Central Neuroplasticity to Pathological Pain: Review of Clinical and Experimental Evidence", Pain, 1993, pp. 259-285, 52, Elsevier Science Publishers B.V.	
	AW	YUN FENG ET AL., "Cloning of a Novel Member of the G Protein-Coupled Receptor Family Related to Peptide Receptors", Biochemical and Biophysical Research Communications, 1997, pp. 651-654, 231, Article No. RC976161, Academic Press	

Examiner	Date	
Signature	Considered	
Oignature .		

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

	INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	Complete if Known				
Substitute	e for form 1449B/PTO			Application Number	10/705,757	
	STATEMENT BY APPLICANT (use as many sheets as necessary)	Filing Date	November 12, 2003			
		First Named Inventor	Eberhard WEIHE			
			Art Unit	1743		
	(use as many sheets as ne	cessa	ry)	Examiner Name	Unassigned	
Sheet	4	of	4	Attorney Docket Number	029310.52818US	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T².
	AX	BRIAN E. HAWES ET AL., "Nociceptin (ORL-1) and μ -Opioid Receptors Mediate Mitrogen-Activated Protein Kinase in CHO Cells Through a G _i -Coupled Signaling Pathway: Evidence for Distinct Mechanisms of Agonist-Mediated Desensitization", Journal of Neurochemistry, 1998, pp. 1024-1033, Vol. 71, No. 3, International Society of Neurochemistry	
	AY	LING-YUAN LI ET AL., "The Stimulatory Effect of Opioids on Mitrogen-Activated Protein Kinase in Chinese Hamster Ovary Cells Transfected to Express µ-Opioid Receptors", Molecular Pharmacology, 1996, pp. 599-602, 50, The American Society for Pharmacology and Experiential Therapeutics	
	AZ	ABDI A. MOHIT ET AL., "p49 ^{3F12} Kinase: A Novel MAP Kinase Expressed in a Subset of Neurons in the Human Nervous System", Neuron, January 1995, pp. 67-78, Vol. 14, Cell Press	
	ВА	VICTOR E. VELCULESCU ET AL., "Serial Analysis of Gene Expression", Science, October 20, 1995, pp. 484-487, Vol. 270	
	ВВ	ANDREW F. WILKS, "Two Putative Protein-Tyrosine Kinases Identified by Application of the Polymerase Chain Reaction", Genetics, March 1989, pp. 1603-1607, Vol. 86, Proc. Natl. Acad. Sci., USA	
		I Data	

Examiner	Date	
Signature	 Considered	

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.